United States Environmental Protection Agency Solid Waste and Emergency Response (OS-305)

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Office of Solid Waste



Environmental Fact Sheet

PLASTICS: THE FACTS ON SOURCE REDUCTION

FROM EPA'S REPORT TO CONGRESS ON METHODS TO MANAGE AND CONTROL PLASTIC WASTES

Discarded plastic products and packaging make up a growing proportion of municipal solid waste. By the year 2000, the amount of plastic we throw away will increase by 50 percent. Current volume estimates for plastic waste range from 14 to 21 percent of the waste stream. By weight plastics contribute seven percent, and less than one percent of plastic waste is currently recycled. Additionally, some plastic items end up as litter that poses ecological risk to the marine environment and aesthetic and economic loss. These facts, and EPA's belief that source reduction is the best method for reducing the environmental impacts of wastes, have led to considering source reduction of plastics.

Source Reduction Defined

Source reduction means decreasing the amount or toxicity of the materials that we throw away. Effective source reduction promotes the use of products that generate the smallest environmental impacts.

Benefits of Reducing Plastic Wastes

Plastics are a target for source reduction because of their rapid growth in the municipal waste stream. Additionally, plastics contain additives (e.g., colorants, stabilizers, plasticizers) that may include toxic constituents such as lead and cadmium. Plastics contribute 28

percent of all cadmium in municipal solid waste and approximately two percent of all lead. EPA is studying substitutes for these two additives of concern.

Any source reduction of plastics, however, must be accomplished within the goal of reducing the amount and toxicity of the entire waste stream. For example, replacing a plastic cup with a paper cup will not necessarily benefit the waste stream as a whole, even though the amount of *plastic* waste is reduced.

How Can We Reduce Plastics in the Waste Stream?

Volume reduction can be accomplished in a number of ways by both consumers and manufacturers. For example, consumers can reuse products and packages as much as possible, avoid use of disposable items such as cups and dinnerware, and try to buy concentrates, bulk foods, and products which require less packaging. Manufacturers can reduce volumes by using less material in their packages and products and using economies of scale in packaging (e.g., concentrates or large "economy size" packaging).

Toxicity reduction must be done by manufacturers of plastic products by replacing toxic constituents with non-toxic or less harmful materials.

Where Can I Find Additional Information?

Call EPA's RCRA/Superfund hotline for a free copy of the following reports:

Executive Summary of EPA's Report to Congress on Methods to Manage and Control Plastic Waste (EPA/530-SW-89-051A).

The Solid Waste Dilemma: An Agenda for Action (EPA/530-SW-89-019)

The toll-free number is 1-800-424-9346, or TDD 1-800-553-7672 for the hearing impaired. In Washington D.C., the number is 382-3000 or TDD 475-9652. Ask the Hotline for information on ordering the full Report to Congress, and about current efforts on municipal solid waste source reduction. The Hotline is open from 8:30 a.m. to 7:30 p.m. EST, Monday through Friday. Ask the Hotline for information on ordering the full report.